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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,103	11/03/2003	Euisu Kim	U 014873-5	5152
<div>7590      07/25/2007</div> <div>Ladas &amp; Parry 26 West 61st Street New York, NY 10023</div>				
			EXAMINER LOFTUS, ANN E	
			ART UNIT 3694	PAPER NUMBER
			MAIL DATE 07/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/700,103		KIM, EUISU	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ann Loftus		3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/3/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/6/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of a certified copy of the foreign priority application submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. The examiner notes that the current application filing date, 3 Nov 2003, is less than a year from the date of the foreign application, 11/03/2003. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference or in order to overcome intervening art, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e). Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Further, a reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national

stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the

information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "100" and "400" have both been used to designate clients. See also "102" and "402". When the same object occurs a second time, the same reference character should be used. The specification must also be amended to align with the corrected drawing.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities.

Appropriate correction is required.

On page 12, in the example of allowable error rates, the allowable error range is set to 10%, and then an error rate of 33.3% is allowed because it is "away from" 10%. This is opposite the normal understanding of an error range and it would imply that each reasonable stock price must be at least 10% different from the actual stock price. Then it recites that values within the error range will be fixed. It's not clear whether fixed means corrected or finalized.

Further, the use of the word "Index" throughout the specification is confusing because sometimes it refers to a benchmark derived from a collection of stock prices as in the Nasdaq Composite Index, and sometimes it refers to a factor or adjustment in a calculation as in the Reasonable Stock Price Valuation Index. For example, the actual stock price multiplied by the Reasonable Stock Price Valuation Index gives the Reasonable Stock Price. Because the invention generates both types of index, a different word should be used for the factor or adjustment type.

Further, the discussion of the Index-proportioned Reasonable Stock Price is difficult to follow. Why does the calculation generate a series of six numbers? If the applicant can clarify without introducing new matter, it would improve the application.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1 and 3, the term "index" should only be used for a stock market index, such as the S&P 500.

As to claim 1, the phrase "the predetermined valuation algorithm" has no antecedent basis.

As to claim 3, the word "fix" more commonly means to correct and thus change, particularly in conjunction with an error, rather than to finalize or immobilize. This makes the intent of the claim unclear.

As to claim 5, as written, the indicators must be reflected to a unique and different degree on each company. This conflicts with the more likely process of allowing the indicators to be reflected to a different degree on different companies, but not requiring a unique degree. Thus the claim is unclear.

As to claim 4, if the allowable error range is 5% to 10%, is an error of 3% allowable? The claim is unclear.

As to claim 6, in order to avoid delay, examination will presume that it depends on claim 1, although it is not specified. Correction is required, and a response without this correction will be considered non-responsive. The claim is unclear.

The remaining claims are rejected as dependent on a rejected parent.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application No. 20020059126 filed 27 June 2001 by Ricciardi in view of the translation of the Abstract of KR Appln. No. 20000059873, which the applicant submitted into the record as prior art, hereafter known as KR 59873.

As to claims 1 and 7, Ricciardi page 1 paragraph 14 teaches an Economic Indicator database (macroeconomic data). Ricciardi page 1 paragraph 3 teaches a Stock Price Indicator database (list of indexes). Ricciardi teaches a method on page 2 in paragraph 18, that uses a valuation algorithm to generate a Valuation Index. Following is an example, incorporating options specified in the reference. One of the models, such as the dividend discount model, generates high low and central valuations for each security in a sector. The sector aggregate valuation is computed, then the ratio of the sector aggregate valuation to the current actual price for a sector index. So if the ratio is 30%, it might be that the model generates prices that are 30% higher than actual for the sector. This ratio represents the price sensitivity of securities for the sector, and it also represents the Reasonable Stock Price Valuation Index, under this algorithm for this sector. The Reasonable Stock Price Valuation Index is then used with the model to determine a reasonable stock price.



A database server is the software and hardware that supports the database. Thus it is inherent in a functional database to have a database server. Further, in a method claim, more patentable weight is given to the method steps than the architecture. Thus the Individual Company's Reasonable Stock Price Valuation Server is interpreted as a function in a logical design as opposed to a physical server machine.

Ricciardi does not specifically teach a company fundamentals database, but it is inherent in his valuations strategy. The models for the price valuations could not be generated without a database of company fundamentals.

Ricciardi does not specifically teach providing the produced applications information to clients through an internet site, or mobile communication device in real time or at regular time interval. KR 59873 teaches providing the produced applications information (estimated price of financial assets) to clients through an internet site, or mobile communication device in real time or at regular time interval. It would have been obvious to a person of ordinary skill at the time of the invention to modify Ricciardi to add providing the produced applications information (estimated price of financial assets) to clients through an internet site, or mobile communication device in real time or at regular time interval because it provides convenience for the clients to be able to receive the information like so.

As to claim 2, Ricciardi on page 8 paragraph 214 teaches selecting the stock price Indicators and the Economic Indicators to influence stock price of the individual company.

As to claim 5, Ricciardi on page 21 paragraph 618 teaches a valuation algorithm is set up to reflect the same numerical value of Economic Indicator and Stock Price Indicator to a different degree on each company listed in a sector (coefficients calculated for each security).

As to claim 6, Ricciardi teaches the regular time interval of 1 day on page 3, paragraph 62.

As to claim 8, Ricciardi teaches on page 21 paragraphs 610 –626 applying Individual Company's Reasonable Stock Price and the current Composite Stock Price Index or NASDAQ Composite Index to the predetermined Index-proportioned Reasonable Stock Price- calculating algorithm.

As to claim 9, Ricciardi teaches on page 21 paragraphs 610 –626 Reasonable Sector Index/Composite Stock Price Index Valuation Server classifying each individual company into an individual sector group or a group forming Composite Stock Price Index or NASDAQ Composite Index, and determining the contribution rate of each individual company to the individual Sector Index, Composite Stock Price Index or NASDAQ Composite Index; and Reasonable Sector Index/Composite Stock Price Index Valuation Server producing Reasonable Sector Index, Reasonable Composite Stock Price Index or Reasonable NASDAQ Composite Index by applying the contribution rate to the Reasonable Sector Index/Composite Stock Price Index/Reasonable NASDAQ Composite Index- calculating algorithm.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricciardi in view of KR 59873, and further in view of US Patent No. 6415268 filed Oct 8 1999 by Korisch.

As to claim 3, Ricciardi teaches five valuation algorithms (strategies) on page 1 paragraph 11 to page 2 paragraph 20. He compares the results in order to detect errors in page 2 paragraph 22. Ricciardi does not teach finalizing the reasonable stock price valuation index if the index is within the predetermined allowable error range or re-selecting Stock Price Indicator and Economic Indicator to influence stock price of the individual company if the index is not within the predetermined allowable error range. Korisch col 9 lines 1-14 teaches finalizing the reasonable stock price valuation index if the index is within the predetermined allowable error range or re-selecting Stock Price Indicator and Economic Indicator to influence stock price of the individual company if the index is not within the predetermined allowable error range. It would have been obvious to a person of ordinary skill in the art to modify the Ricciardi KR 59873 combination to add finalizing the reasonable stock price valuation index if the index is within the predetermined allowable error range or re-selecting Stock Price Indicator and Economic Indicator to influence stock price of the individual company if the index is not within the predetermined allowable error range in order to avoid presenting the client with a valuation too far from the market value.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricciardi in view of KR 59873, and Korisch and further in view of Official Notice.

As to claim 4, the Ricciardi KR 59873 Korisch combination does not specifically teach an allowable error range from 5% to 10%. Official Notice is taken that an error range of +/- 5% or 10% is old and well known. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the Ricciardi KR 59873 Korisch combination to add an allowable error range of +/- 10% or +/- 5% in order to allow recalculations, perhaps including more data, of values that appear to be unusual. Such recalculations can help prevent mistakes from reaching the client.

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricciardi in view of KR 59873, and further in view of Official Notice.

The claims recite the following collection of company fundamentals and market indicators:

outstanding shares, equity capital, par value, sales, operating income, ordinary income, and net income for last 10 years, assets, capital, liability, ration of financial expense to sales, debt ratio, quick ratio, PER (Price Earning Ratio), PBR (Price Book Value Ratio), PCR (Price Cashflow Ratio), EPS (Earning Per Share), BPS (Book Value Per Share); Dow-Jones index (30, 20, 15), NASDAQ composite index, S&P500 index, S&P 100 index, NASDAQ Futures index, S&P500 Futures index, Philadelphia semiconductor index, Goldman-Sachs internet index, all sorts of Sector Index data (Large capital stock, Medium capital stock, Small capital stock, Food Beverage and Tobacco, Textile and Wearing, Paper and Wood Products, Chemicals, Pharmaceuticals, Non-metal Products,

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Metal Products, Machinery, Electric and Electronics, Medical and Precision Machines, Transportation Equipment, Distribution, Electric & Gas, Construction, Transportation and Storage, Telecom, Banking, Securities, Insurance, Manufacturing and IT index), an individual company's stock price, Option Index, trading volume, customer's deposit, a stock price of the Stock Exchange-listed companies in other countries (Germany, England, 35 France, Japan, China, Korea, Taiwan and the like), and Composite Stock Price Index and Future Index of such countries; and interest rate, bond interest rate, exchange rate, oil price, diffusion index (DI), leading composite index (LCI), coincident composite index (CCI), consumer price index (CPI) and GDP growth rate, technical indexes including moving average, disparity, psychological line, OBV (On Balance Volume), VR (Volume Ratio), RSI (Relative Strength Index), Envelope, Bollinger Band, Parabolic SAR, Pivot Lines, MACD (Moving Average Convergence Divergence), Stochastics, and DMS (Directional Movement System).

Ricciardi does not specifically teach this collection. Official Notice is taken that the above fundamentals and indicators are old and well-known. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the above as inputs to a valuation process because they are established and well-defined indicators.

### ***Conclusion***


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Application No 20020174081 filed 1 May 2001 by Charbonneau teaches a company fundamentals database in page 2 paragraph 23.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Loftus whose telephone number is 571-272-7342. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AL  
7/18/07

  
ELLA COLBERT  
PRIMARY EXAMINER